YAMAHA RX-V490/390

Natural Sound Stereo Receiver

Thank you for selecting this YAMAHA stereo receiver.

OWNER'S MANUAL

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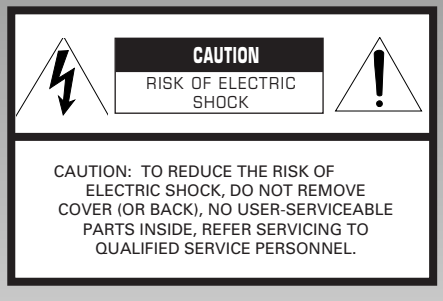
IMPORTANT!
Please record the serial number of this unit in the space below.

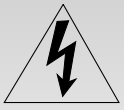
Serial No.:

The serial number is located on the rear of the unit.
Retain this Owner's Manual in a safe place for future reference.

WARNING
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.


CAUTION
RISK OF ELECTRIC SHOCK
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK), NO USER-SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

- Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

SAFETY INSTRUCTIONS

1 Read Instructions – All the safety and operating instructions should be read before the unit is operated.

2 Retain Instructions – The safety and operating instructions should be retained for future reference.

3 Heed Warnings – All warnings on the unit and in the operating instructions should be adhered to.

4 Follow Instructions – All operating and other instructions should be followed.

5 Water and Moisture – The unit should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

6 Carts and Stands – The unit should be used only with a cart or stand that is recommended by the manufacturer.

6A A unit and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit and cart combination to overturn.

7 Wall or Ceiling Mounting – The unit should be mounted to a wall or ceiling only as recommended by the manufacturer.

8 Ventilation – The unit should be situated so that its location or position does not interfere with its proper ventilation. For example, the unit should not be situated on a bed, sofa, rug, or similar surface, that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

9 Heat – The unit should be situated away from heat sources such as radiators, stoves, or other appliances that produce heat.

10 Power Sources – The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the unit.

11 Power-Cord Protection – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

12 Cleaning – The unit should be cleaned only as recommended by the manufacturer.

13 Nonuse Periods – The power cord of the unit should be unplugged from the outlet when left unused for a long period of time.

14 Object and Liquid Entry – Care should be taken so that objects do not fall into and liquids are not spilled into the inside of the unit.

15 Damage Requiring Service – The unit should be serviced by qualified service personnel when:

A. The power-supply cord or the plug has been damaged; or

B. Objects have fallen, or liquid has been spilled into the unit; or

C. The unit has been exposed to rain; or

D. The unit does not appear to operate normally or exhibits a marked change in performance; or

E. The unit has been dropped, or the cabinet damaged.

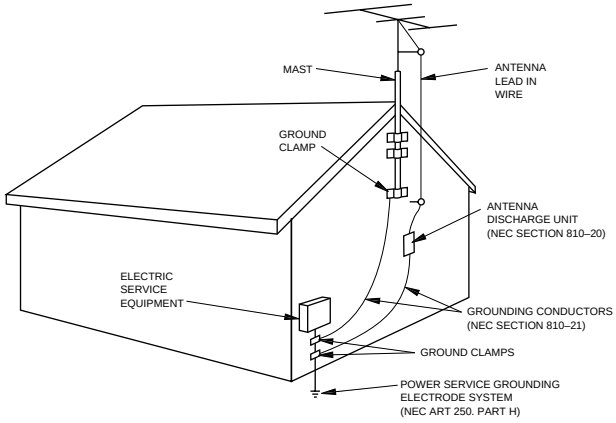
16 Servicing – The user should not attempt to service the unit beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.

17 Power Lines – An outdoor antenna should be located away from power lines.

18 Grounding or Polarization – Precautions should be taken so that the grounding or polarization is not defeated.

19 Outdoor Antenna Grounding – If an outside antenna is connected to this unit, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF ANTENNA GROUNDING


MAST
ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810–20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810–21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250. PART H)

NEC – NATIONAL ELECTRICAL CODE

Note to CATV system installer:
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Caution: Read this before operating your unit

1 To assure the finest performance, please read this manual carefully. Keep it in a safe place for future reference.

2 Install this unit in a cool, dry, clean place – away from windows, heat sources, sources of excessive vibration, dust, moisture and cold. Avoid sources of humming (transformers, motors). To prevent fire or electrical shock, do not expose the unit to rain or water.

3 Do not operate the unit upside-down. It may overheat, possibly causing damage.

4 Never open the cabinet. If something drops into the set, contact your dealer.

5 Do not use force on switches, controls or connection wires. When moving the unit, first disconnect the power plug and the wires connected to other equipment. Never pull the wires themselves.

6 Do not attempt to clean the unit with chemical solvents; this might damage the finish. Use a clean, dry cloth.

7 Always set the VOLUME control to "– ∞" before starting the audio source play. Increase the volume gradually to an appropriate level after the play back has been started.

8 To prevent lightning damage, pull out the power cord and remove the antenna cable during an electrical storm.

9 Be sure to read the "TROUBLESHOOTING" section regarding common operating errors before concluding that the unit is faulty.

10 AC outlet
Do not connect audio equipment to the AC outlet on the rear panel if that equipment requires more power than the outlet is rated to provide.

FCC INFORMATION

1. IMPORTANT NOTICE : DO NOT MODIFY THIS UNIT!
This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

2. IMPORTANT : When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

3. NOTE : This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices.

This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices.

Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to coaxial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Electronics Corp., U.S.A. 6660 Orangethorpe Ave, Buena Park, CA 90620.

The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.

We Want You Listening For A Lifetime

YAMAHA and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion – and, most importantly, without affecting your sensitive hearing. Since hearing damage from loud sounds is often undetectable until it is too late, YAMAHA and the Electronic Industries Association's Consumer Electronics Group recommend you to avoid prolonged exposure from excessive volume levels.

FEATURES

- **5 Speaker Configuration**

  RX-V490

  Front: 70W + 70W (8Ω) RMS Output Power, 0.04% THD, 20–20,000 Hz
  Center: 70W (8Ω) RMS Output Power, 0.1% THD, 1 kHz
  Rear: 15W + 15W (8Ω) RMS Output Power, 0.7% THD, 1 kHz

  RX-V390

  Front: 60W + 60W (8Ω) RMS Output Power, 0.04% THD, 20–20,000 Hz
  Center: 60W (8Ω) RMS Output Power, 0.2% THD, 1 kHz
  Rear: 15W (8Ω) RMS Output Power, 0.7% THD, 1 kHz

- **Digital Sound Field Processor**

  RX-V490

  4 Programs for Digital Sound Field Processing
  2 Programs for Dolby Surround Decoding (DOLBY PRO LOGIC and DOLBY PRO LOGIC ENHANCED)

  RX-V390

  2 Programs for Digital Sound Field Processing
  2 Programs for Dolby Surround Decoding (DOLBY PRO LOGIC and DOLBY 3 STEREO)

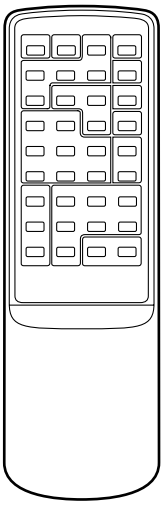
- **Automatic Input Balance Control for Dolby Surround**
- **Test Tone Generator for Easier Speaker Balance Adjustment**
- **3 Center Channel Modes (NORMAL/WIDE/PHANTOM)**
- **40-Station Random Access Preset Tuning**
- **Automatic Preset Tuning**
- **Preset Station Shifting Capability (Preset Editing)**
- **IF Count Direct PLL Synthesizer Tuning System**
- **Video Signal Input/Output Capability**
- **SLEEP Timer**
- **Remote Control Capability**

SUPPLIED ACCESSORIES

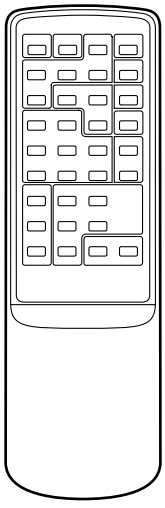
After unpacking, check that the following parts are contained.

Remote Control Transmitter

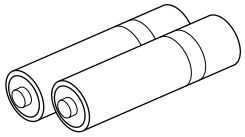
RX-V490



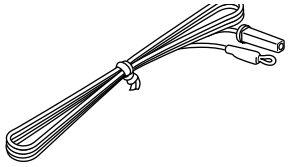
RX-V390



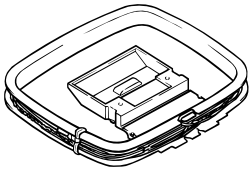
Batteries (size AA, R6, UM-3)



Indoor FM Antenna



AM Loop Antenna



PROFILE OF THIS UNIT

You are the proud owner of a Yamaha stereo receiver – an extremely sophisticated audio component. The Digital Sound Field Processor (DSP) built into this unit takes advantage of Yamaha's undisputed leadership in the field of digital audio processing to bring you a whole new world of listening experiences. Follow the instructions in this manual carefully when setting up your system, and this unit will sonically transform your room into a totally new listening environment. In addition, you get incredible realism from Dolby-encoded video sources using the built-in Dolby Pro Logic Surround Decoder.
Please read this operation manual carefully and store it in a safe place for later reference.

Digital Sound Field Processing

What is it that makes live music so good? Today's advanced sound reproduction technology lets you get extremely close to the sound of a live performance, but chances are you'll still notice something missing: the acoustic environment of the live concert hall. Extensive research into the exact nature of the sonic reflections that create the ambience of a large hall has made it possible for Yamaha engineers to bring you this same sound in your own listening room, so you'll feel all the sound of a live concert.

Furthermore, our technicians, armed with sophisticated measuring equipment, have even made it possible to capture the acoustics of actual music venues to allow you to accurately recreate live performance environments in your own home.

Dolby Pro Logic Surround

The Dolby Pro Logic Surround Decoder program lets you experience the dramatic realism and impact of a Dolby Surround movie theater sound in your own home. Dolby Pro Logic gets its name from its professional-grade steering logic circuitry, which provides greater effective front and rear channel separation for a much higher degree of realism than the "passive" Dolby Surround circuits found in less sophisticated home audio/video equipment. Dolby Pro Logic Surround provides a true center channel, so there are four independent channels, unlike passive Dolby Surround which has in effect only three channels: left, right, and rear. This center channel allows listeners seated in even less-than-ideal positions to hear the dialog originating from action on the screen while getting a stereo effect as well.

In addition, this unit features a built-in automatic input balance control. This circuit always presents you the best surround conditions without performing manual adjustments.

Dolby Pro Logic Surround + DSP **RX-V490 only**

You can also enjoy a combination of Dolby Pro Logic Surround and DSP in the sound field program " DOLBY PRO LOGIC ENHANCED".
It recreates the surround effect of a movie theater, effectively duplicating its multiple surround loudspeaker system, completely surrounding the listener with the sounds of the action taking place on the screen.

SPEAKER SETUP

SPEAKERS TO BE USED

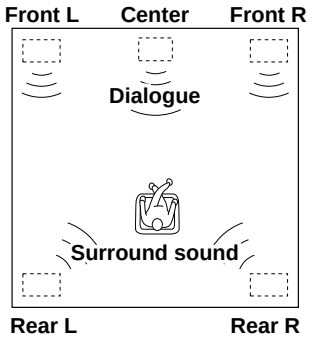
This unit is designed to provide the best sound-field quality with a 5 speaker configuration. The most effective speakers to use with this unit are front speakers, rear speakers and a center speaker. You may omit the center speaker. (Refer to the "**4-Speaker Configuration**" shown below.)
The front speakers are used for the main source sound plus the effect sounds. They will probably be the speakers from your present stereo system. The rear speakers are used for the effect and surround sounds, and the center speaker is for the center sounds (dialog etc.) within the Dolby Surround encoded programs. The center speaker needs to be equal in power to the front speakers, although the rear speakers should not be equal. However, all the speakers should have high enough power handling to accept the maximum output of this unit.

SPEAKER CONFIGURATION

5-Speaker Configuration

This configuration is the most effective and recommended one. In this configuration, the center speaker is necessary as well as the rear speakers. If a Dolby Surround program is selected, conversations will be output from the center speaker and the ambience will be excellent.

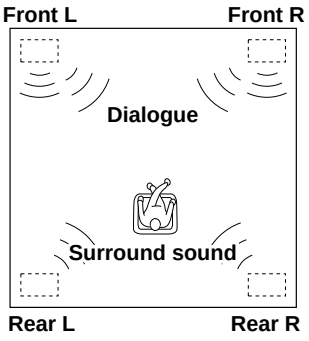
- Set the center channel mode to the "**NORMAL**" or "**WIDE**" position. (For details, refer to page 12.)



4-Speaker Configuration

The center speaker is not used in this configuration. If a Dolby Surround program is selected, the center sound is output from the left and the right front speakers. However, the sound effect of other programs can be the same as that of the 5-speaker configuration.

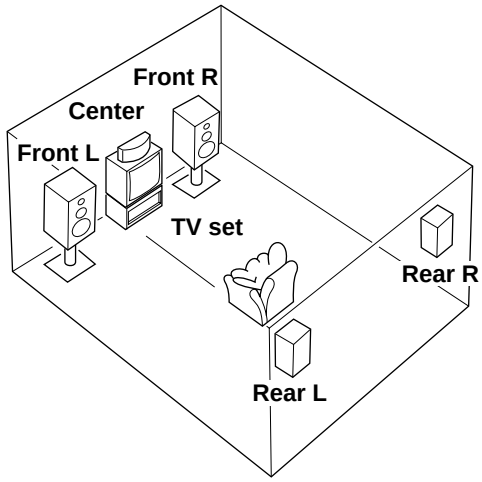
- Be sure to set the center channel mode to the "**PHANTOM**" position. (For details, refer to page 12.)
- **RX-V390 only**
  The program **DOLBY 3 STEREO** is useless in this configuration.



* **RX-V390 only**
As this unit is equipped with a monaural amplifier for the rear channel, you may use one rear speaker only instead of using two rear speakers.
However, the use of two rear speakers is recommended when there are more than one listener in the listening room.
When using one rear speaker, place it right behind your listening position.

SPEAKER PLACEMENT

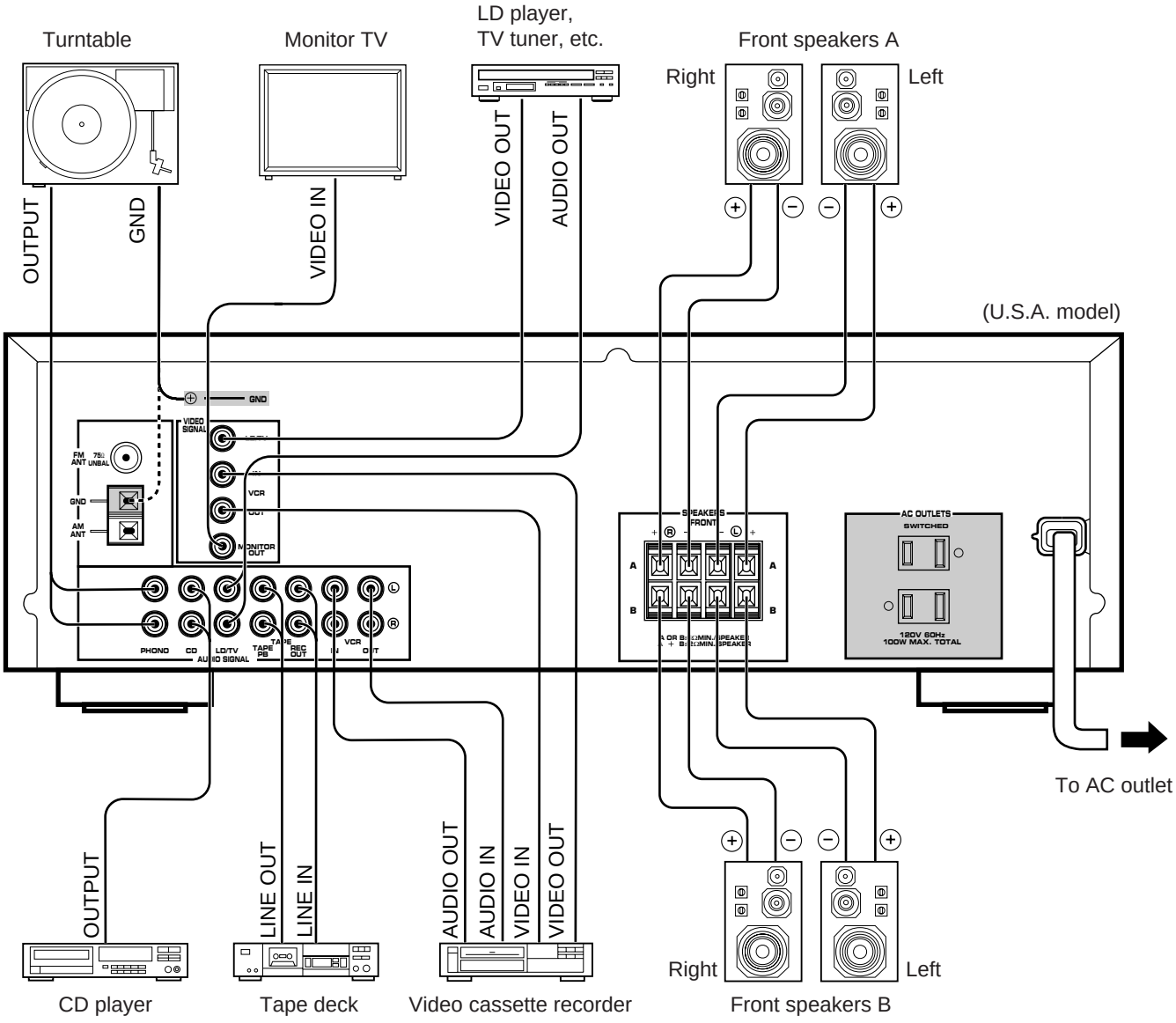
The recommended speaker configuration, the 5-speaker configuration, will require two speaker pairs: **front speakers** (your normal stereo speakers), and **rear speakers**, plus a **center speaker**. When you place these speakers, refer to the following.



Front: In normal position. (The position of your present stereo speaker system.)
Rear: Behind your listening position, facing slightly inward. Nearly six feet (approx. 1.8 m) up from the floor.
Center: Precisely between the front speakers. (To avoid interference with TV sets, use a magnetically shielded speaker.)

CONNECTIONS

- Before attempting to make any connections to or from this unit, be sure to first switch OFF the power to this unit and to any other components to which connections are being made.
- When making connections between this unit and other components, be sure all connections are made correctly, that is to say **L** (left) to **L**, **R** (right) to **R**, "+" to "+" and "–" to "–". Also, refer to the owner's manual for each component to be connected to this unit.



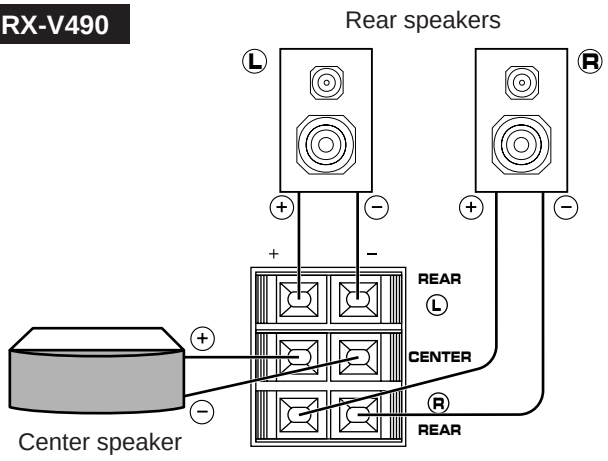
: Refer to "**ABOUT THE ACCESSORY TERMINALS**" on page 9.

Note on front speaker connection:
One or two speaker systems can be connected to this unit. If you connect only one speaker system, connect it to either the **SPEAKERS A** or **B** terminals..

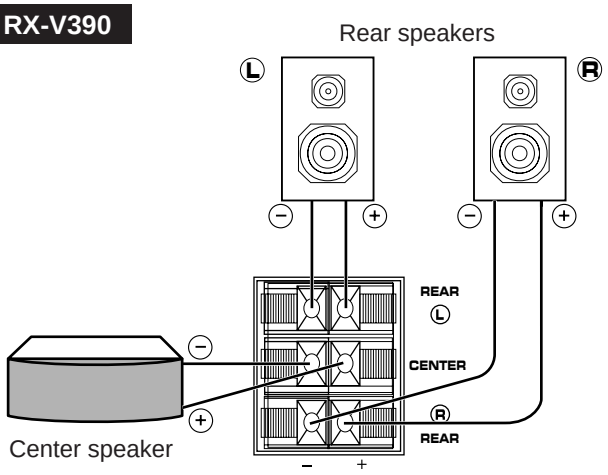
Center and rear speakers

Connect the respective speakers to this unit as figured below.

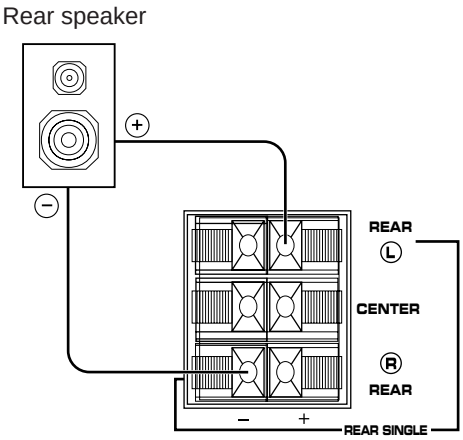
RX-V490



RX-V390



Only one rear speaker can also be used in place of two rear speakers.
For connecting one rear speaker, follow the method shown below.



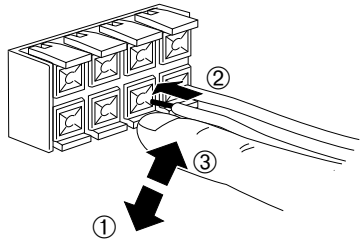
For connecting speakers

Connect the **SPEAKERS** terminals to your speakers with wire of the proper gauge, cut as short as possible. If the connections are faulty, no sound will be heard from the speakers. Make sure that the polarity of the speaker wires is correct, that is, + and – markings are observed. If these wires are reversed, the sound will be unnatural and will lack bass. **Do not let the bare speaker wires touch each other and do not let them touch the metal parts of this unit as this could damage this unit and/or speakers.**

Note
Use speakers with the specified impedance shown on the rear of this unit.

How to Connect:

Red: positive (+)
Black: negative (–)

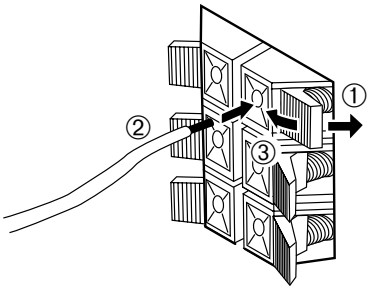


① Press and open the tab.
② Insert the bare wire. [Remove approx. 5mm (1/4") insulation from the speaker wires.]
③ Press the tab back to the original position and secure the wire.

RX-V390 only

For connecting to the REAR and CENTER SPEAKERS terminals

Red: positive (+)
Black: negative (–)



① Press the tab.
② Insert the bare wire. [Remove approx. 5mm (1/4") insulation from the speaker wires.]
③ Release the tab and secure the wire.

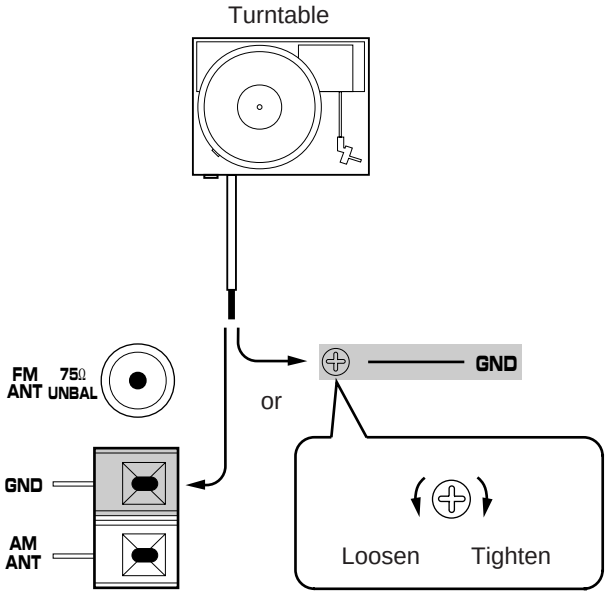
ABOUT THE ACCESSORY TERMINALS

AC OUTLET(S) (SWITCHED)

(U.S.A., Canada and General models)
..... 2 SWITCHED OUTLETS
(Australia model) ..... 1 SWITCHED OUTLET
Use these to connect the power cords from your components to this unit.
The power to the **SWITCHED** outlets is controlled by this unit's **POWER** switch or the provided remote control transmitter's **POWER** key. These outlets will supply power to any component whenever this unit is turned on.
The maximum power (total power consumption of components) that can be connected to the **SWITCHED AC OUTLET(S)** is 100 watts.

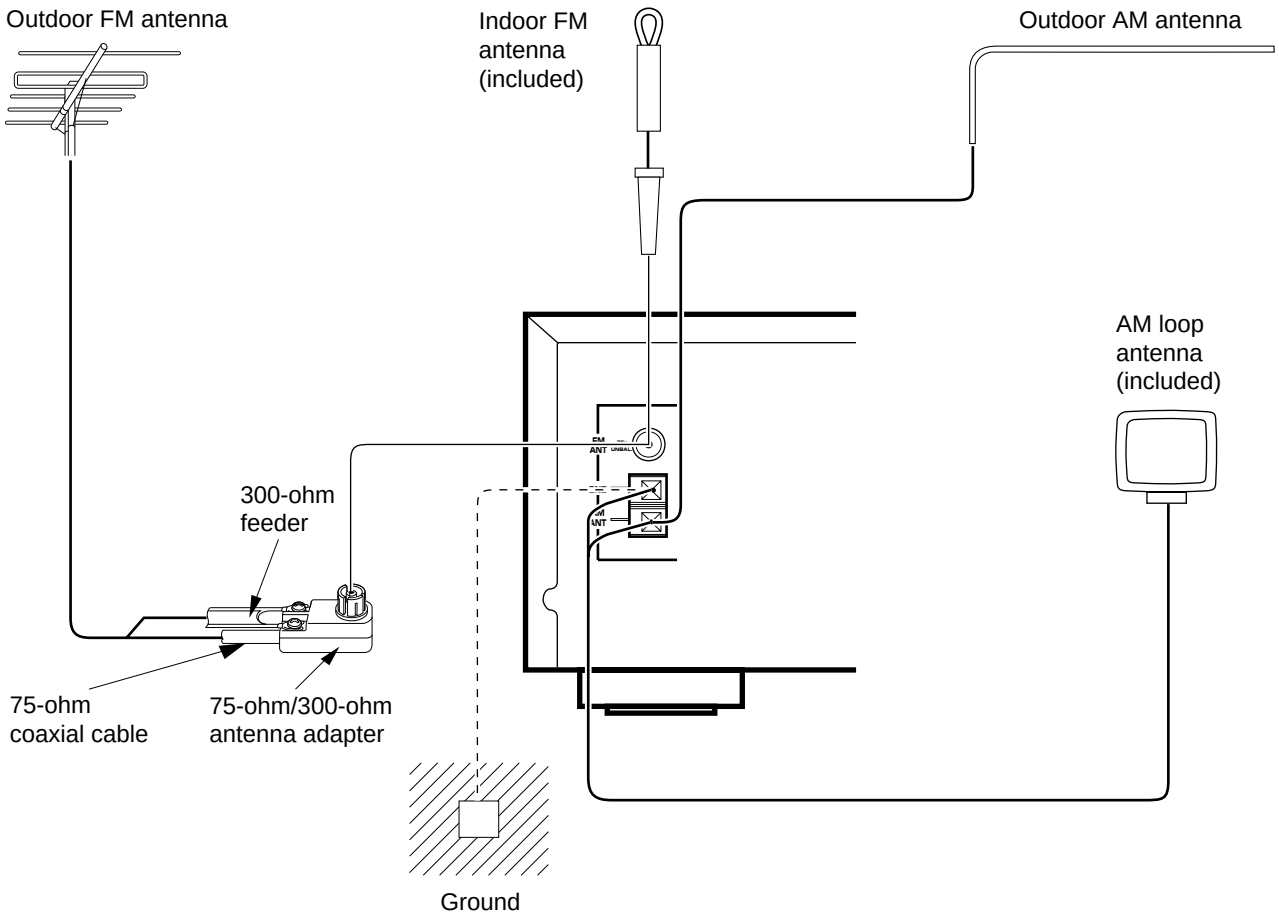
GND terminal (For turntable use)

Connecting the ground wire of the turntable to the **GND** terminal will normally minimize hum, but in some cases better results may be obtained with the ground wire disconnected. Use one of the two **GND** terminals on the rear of this unit for the connection.

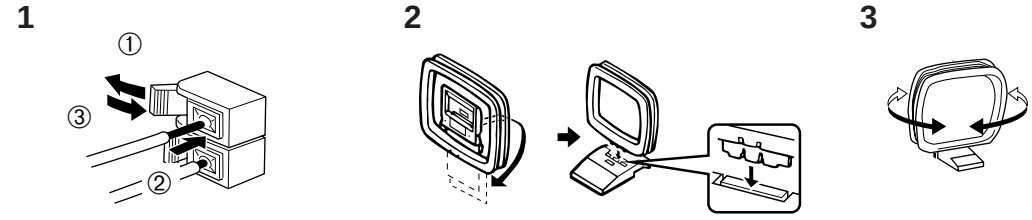


ANTENNA CONNECTIONS

- Each antenna should be connected to the designated terminals correctly, referring to the following diagram.
- Both AM and FM indoor antennas are included with this unit. In general, these antennas will probably provide sufficient signal strength. Nevertheless, a properly installed outdoor antenna will give clearer reception than an indoor one. If you experience poor reception quality, an outdoor antenna may result in improvement.



Connecting the AM loop antenna



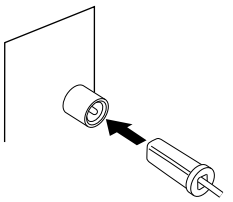
* The AM loop antenna should be placed apart from the main unit. The antenna may be hung on a wall.
* The AM loop antenna should be kept connected, even if an outdoor AM antenna is connected to this unit.

GND terminal

For maximum safety and minimum interference, connect the **GND** terminal to a good earth ground. A good earth ground is a metal stake driven into moist earth.

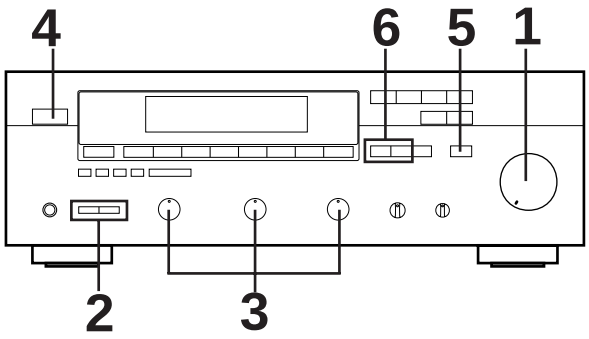
Notes

- When connecting the indoor FM antenna, insert its connector into the **FM ANT** terminal firmly.
- If you need an outdoor FM antenna to improve FM reception quality, either 300-ohm feeder or coaxial cable may be used. In locations troubled by electrical interference, coaxial cable is preferable.

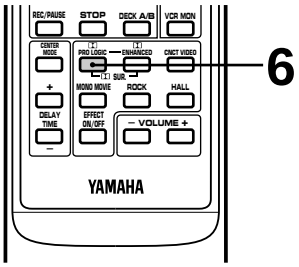


SPEAKER BALANCE ADJUSTMENT

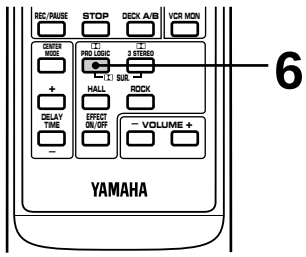
This procedure lets you adjust the sound output level balance between the front, center, and rear speakers using the built-in test tone generator. With this adjustment, the sound output level heard at the listening position will be the same from each speaker. This is important for the best performance of the digital sound field processor.



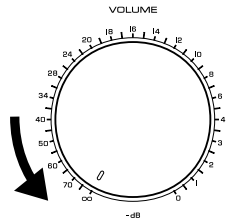
RX-V490



RX-V390

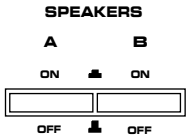


1



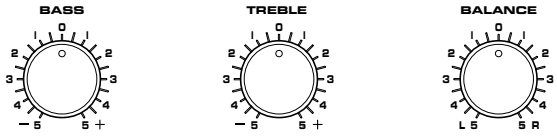
Set to the " ∞ " position.

2 Select the front speakers to be used.



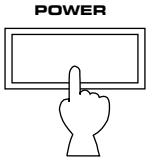
* If you use two front speaker systems, press both the A and B switches.

3

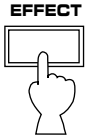


Set to the "0" position.

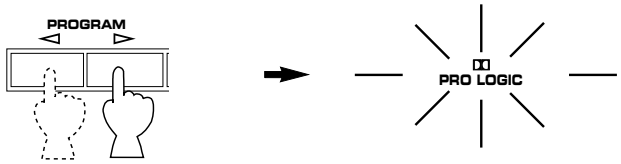
4 Turn the power on.



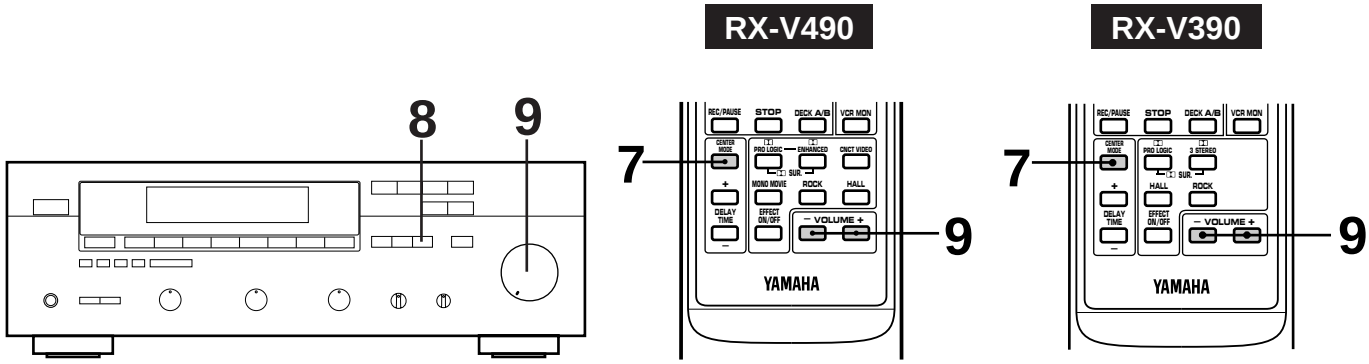
5 Turn the DSP on, so that a program name appears on the display.



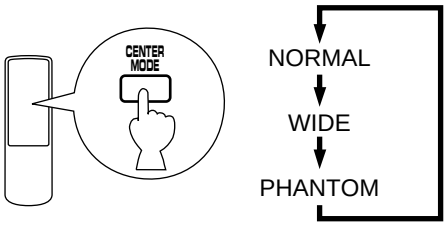
6 Select PRO LOGIC, so that the corresponding name is illuminated on the display.



CONTINUED



7 Select the center channel output mode according to your speaker configuration.
(Refer to "**SPEAKER CONFIGURATION**" on page 6.)



On the feature of each mode, refer to the "**Note**" shown below.

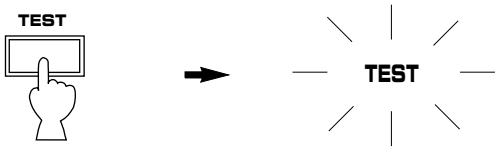
Note
In step 7, when you select the center channel output mode, note the following.

For 5 speaker configuration)
NORMAL: Select this mode when you use a center speaker that is smaller than the front speakers. In this mode, the bass tone will be output from the front speakers.
WIDE: Select this mode when you use the center speaker approximately same sized as the front speakers.

For 4 speaker configuration)
PHANTOM: Select this mode when you do not use the center speaker. The center sound will be output from the left and right front speakers.

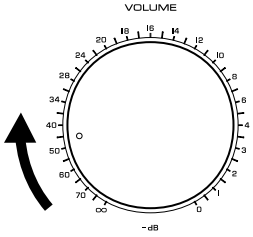
* **RX-V390 only**
When the **DOLBY 3 STEREO** program is used, the **PHANTOM** mode cannot be selected.

8



Flashes continuously.

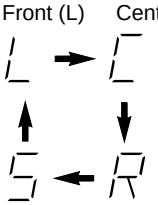
9 Turn up the volume.



You will hear a test tone (like pink noise) from the left front speaker, then the center speaker, then the right front speaker, and then the rear speakers, for about two seconds each. The display changes as shown below.

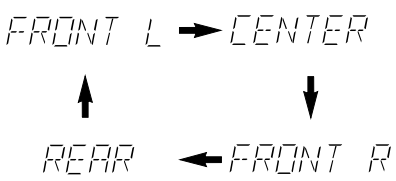
RX-V490

Front (L) Center



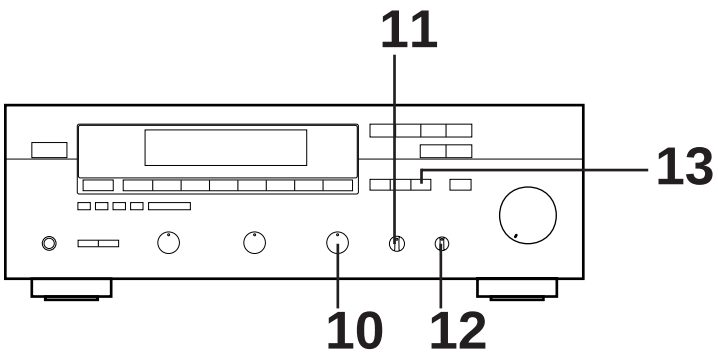
Rear (L and R) Front (R)

RX-V390



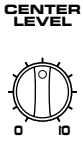
(L and R)

* The test tone from the left rear speaker and the right rear speaker will be heard at the same time.

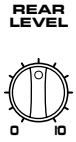


10 Adjust the **BALANCE** control so that the effect sound output level of the left front speaker and the right front speaker are the same.

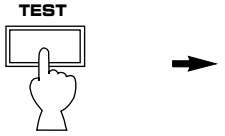
11 Adjust the sound output level of the center speaker to be at the same level as that of the front speakers with the **CENTER LEVEL** control.



12 Adjust the sound output level of the rear speakers to be at the same level as that of the front speakers with the **REAR LEVEL** control.



13 Cancel the test tone.

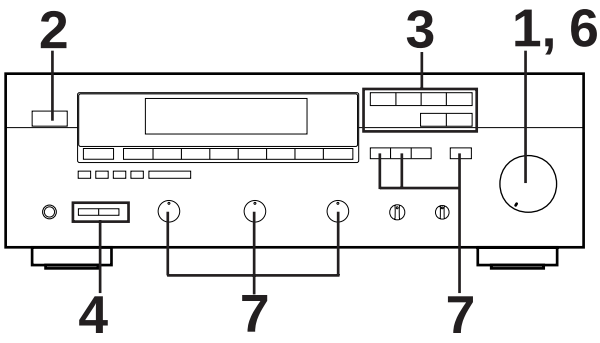


"TEST" stops flashing and disappears.

Notes

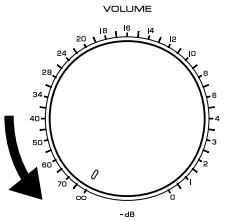
- Once you have completed these adjustments, you can adjust whole sound level on your audio system by using the **VOLUME** control (or the **VOLUME** keys on the remote control transmitter).
- If you use external power amplifiers, their volume controls may also be adjusted to achieve proper balance.
- In step 11, if the center channel mode is in the "**PHANTOM**" position, the sound output level of the center speaker cannot be adjusted. This is because in this mode, the center sound is automatically output from the left and right front speakers.

BASIC OPERATIONS



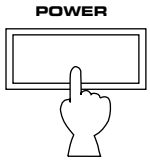
TO PLAY A SOURCE

1

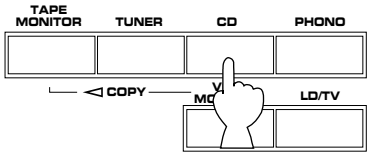


Set to the " ∞ " position.

2 Turn the power on.

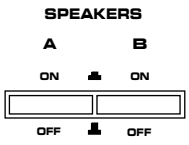


3 Select the desired input source by using the input selector buttons.
(For video sources, turn the TV/monitor ON.)



* The name of the selected input source will appear in the display.

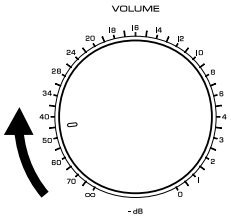
4 Select the front speakers to be used.



* If you use two front speaker systems, press both the A and B switches.

5 Play the source. (For detailed information on the tuning operation, refer to page 17.)

6



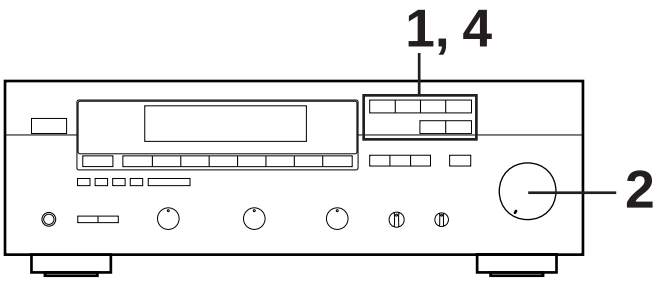
Adjust to the desired output level.

7 If desired, adjust the **BASS, TREBLE, BALANCE** controls, etc. (refer to page 16) and use the digital sound field processor. (Refer to page 23.)

Notes on using the input selector buttons

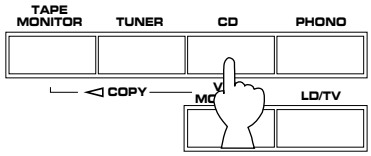
- Note that pressing on each input selector button selects the source which is connected to the corresponding input terminals on the rear panel.
- The selection of **TAPE MONITOR** or **VCR MONITOR** cannot be canceled by pressing another input selector button. To cancel it, press it again.
- In step 3, if two or more program sources are selected at the same time, be sure to remember the priority order of the input sources.
  Priority order of sources: 1) **TAPE MONITOR**, 2) **VCR MONITOR**, 3) **LD/TV**, **TUNER**, **CD** or **PHONO**.
  * If you select **LD/TV**, **TUNER**, **CD** or **PHONO**, be sure that neither **TAPE MONITOR** nor **VCR MONITOR** have been selected.
  * If you select **TAPE MONITOR** and **VCR MONITOR** and another input selector button at the same time, the playback result will be the video image from the VCR and the sound from the audio tape.
  * If you select both **LD/TV** and **TAPE MONITOR** at the same time, the playback result will be the video image from the LD player and the sound from the audio tape.
  * Once you play the LD player, its video image will not be interrupted even if other input selector buttons except **VCR MONITOR** are selected.

To turn off the power
Press the **POWER** switch again.



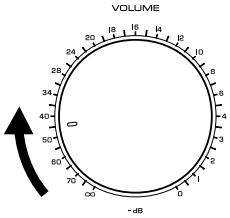
TO RECORD A SOURCE TO TAPE (OR DUB FROM TAPE TO TAPE)

1 Select the source to be recorded.



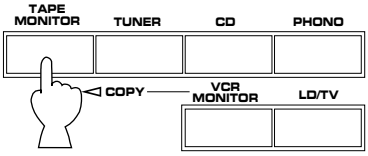
* To dub from tape to tape, refer to the "**Notes**" shown at right.
* When you select **LD/TV**, **TUNER**, **CD** or **PHONO**, make sure that neither **TAPE MONITOR** nor **VCR MONITOR** is also selected.

2 Play the source and then turn the **VOLUME** control up to confirm the input source. (For detailed information on the tuning operations, refer to the page 17.)



3 Set the tape deck or VCR to the recording mode.

4 To monitor the audio and/or video signals being recorded, press the input selector button for the tape deck or VCR used to make the recording.



Notes

- To dub from tape to tape, only the following method of dubbing can be performed.

SOURCE		RECORDER
VCR (or tape deck) connected to the VCR terminals.	→	Tape deck connected to the TAPE terminals.

- The DSP, **VOLUME**, **BASS**, **TREBLE** and **BALANCE** control settings have no effect on the material being recorded.